

# **I-405/SR 167 Corridor**

## **Executive Advisory Group**

Meeting #3

Renton Community Center

Dec. 6, 2016

# Introductions

**Roger Millar, P.E., AICP**  
Secretary of Transportation

# Agenda

- Introductions
- I-405 Partner Program Updates
  - WSDOT
  - Sound Transit
  - King County Parks
- Public Comment
- Wrap-up and next steps

# I-405 Master Plan

## Regional Consensus

- EIS Record of Decision, 2002

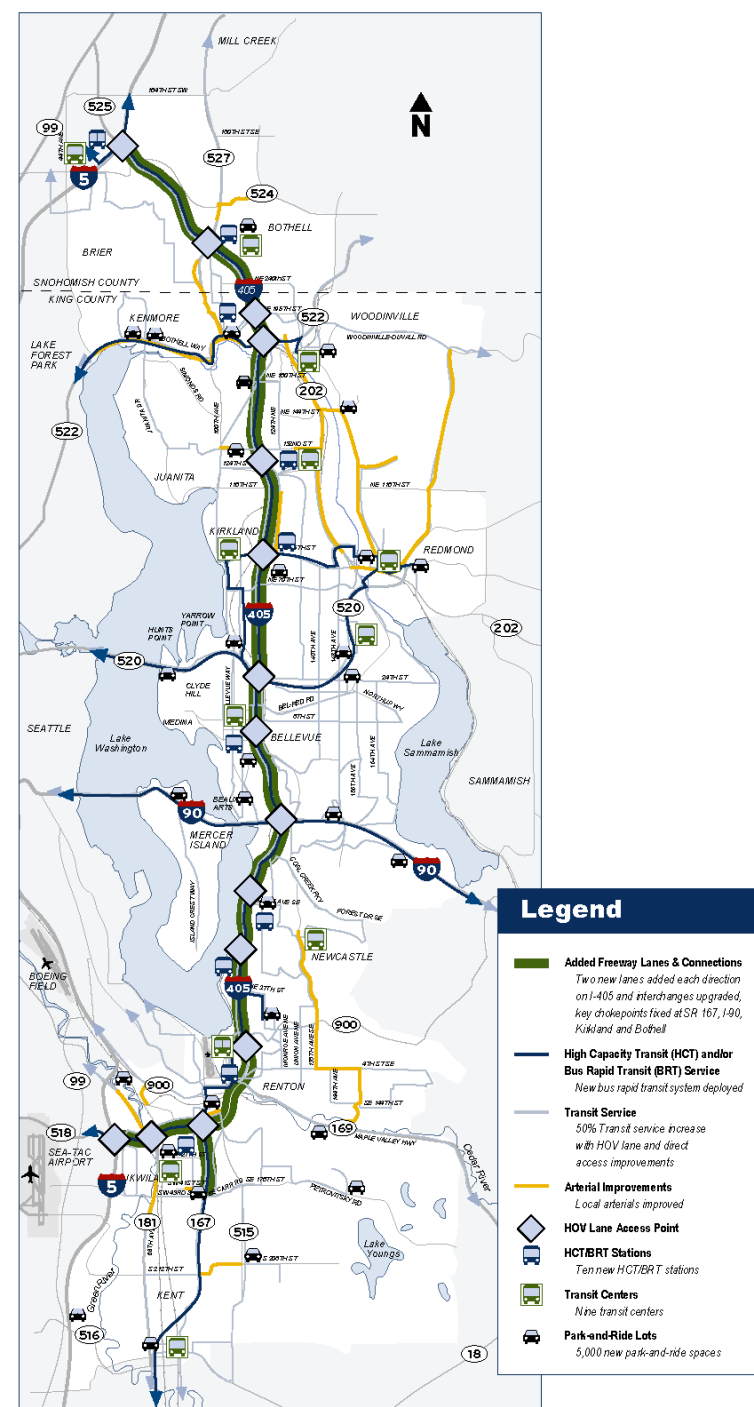
## Roadways

- 2 new lanes in each direction
- Local arterial improvements

## Transit & Transportation Choices

- Bus Rapid Transit system
- New transit centers
- 50% transit service increase
- HOV direct access ramps and flyer stops
- Potential managed lanes system
- 5000 new Park & Ride spaces
- 1700 new vanpools

## Environmental Enhancements



# I-405 Master Plan: Multimodal and making progress

**Park and Ride expansions**  
80% complete or funded



**Transit center expansions**  
70% complete



**Bus Rapid Transit stations**  
70% complete



**Local arterial improvements**  
50% complete



**Add 2 lanes in each direction**  
45% complete or funded



**Transit service increase**  
40% complete



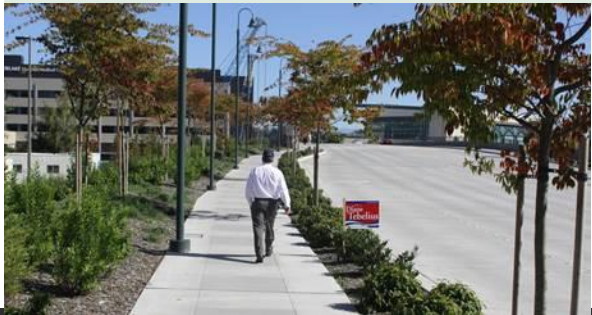
**Direct Access**  
12% complete



**Vanpool service increase**  
30% complete



**Pedestrian/bicycle improvements**  
25% complete



# WSDOT I-405/SR 167 Update

**Jennifer Charlebois, P.E.**

Director of Toll Systems & Engineering  
WSDOT Toll Division

**Kim Henry, P.E.**

I-405/SR 167 Corridor Program Director



# I-405 express toll lanes

## Quick facts

- Opened Sept. 27, 2015
- 17 miles of express toll lanes
- Operation hours: **5 a.m. to 7 p.m. Mon – Fri**
- Toll Rates
  - Minimum Toll Rate \$ 0.75
  - Maximum Toll Rate \$ 10.00
- Carpool Policy
  - 3+ carpools with Flex Pass exempt at all times
  - 2+ carpools exempt except 5-9 a.m. and 3-7 p.m. on weekdays



# Goal #1: Offer drivers a choice

## What we anticipated

- **Ramp-up:** Total trips projected at 12.1 million in the first year.
  - National experience shows it takes up to a year for drivers to adjust.
- **Choice:** Drivers may not use the express toll lanes everyday, but they offer drivers a choice when they need it most.
- **Toll rates:** Typical rates would range between 75 cents and \$4.

## What we're seeing

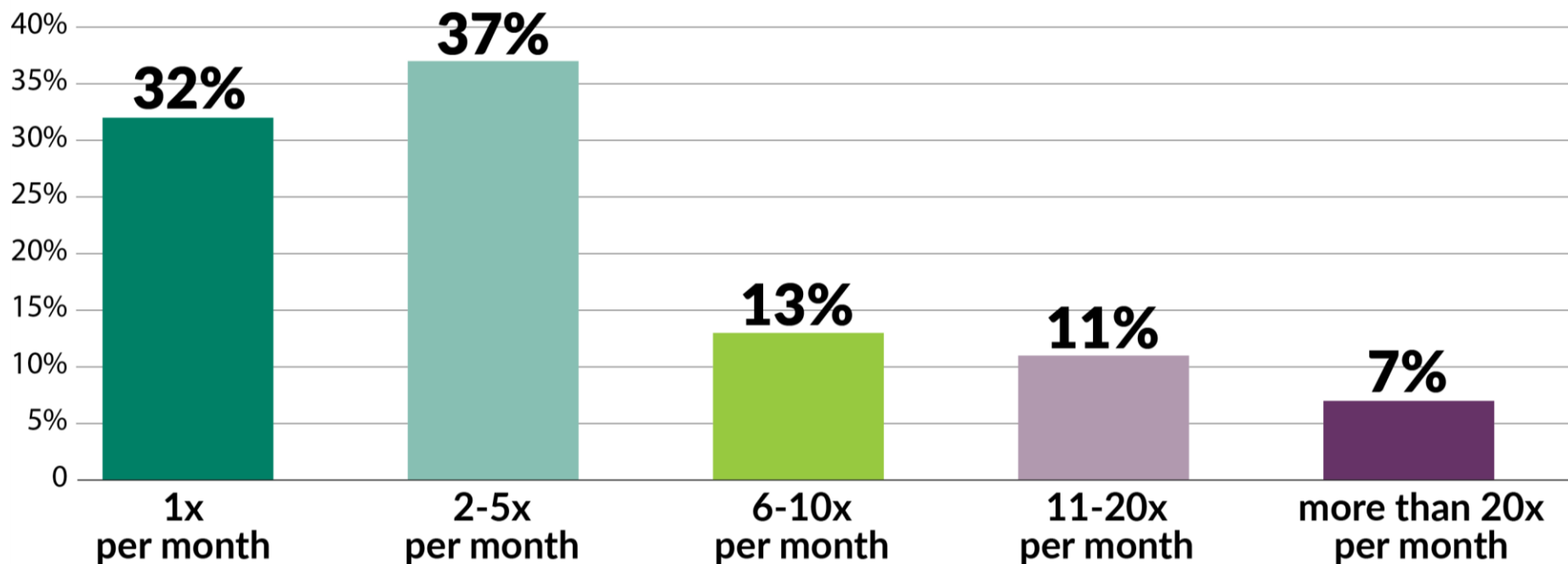
- **Ramp-up:** Drivers made a total of 14.5 million trips in the first year.
  - Drivers adjusted much faster than anticipated.
- **Choice:**
  - 70 percent of express toll lane commuters use the lanes between 1 and 5 times a month.
  - Drivers value this choice. Even after one year, 50,000 new vehicles used the express toll lanes for the first time September 2016.
- **Toll rates:** Average peak period, peak direction toll rate is \$2.50.



# What we're seeing:

## Drivers use the lanes when they need them

Average monthly express toll lane travel frequency for  
*Good To Go!* pass users  
(Oct. 2015 – Sept. 2016)

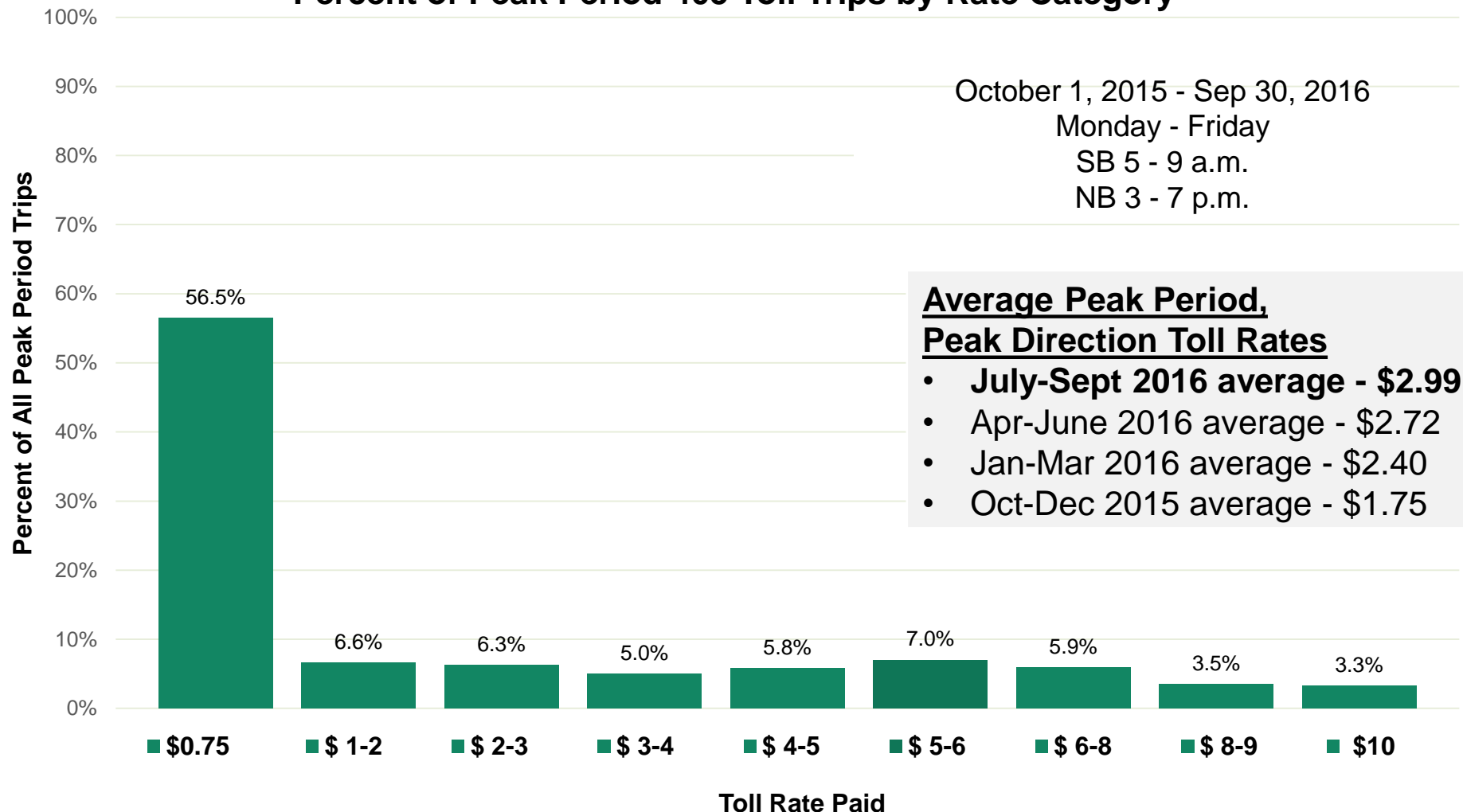


Source: Unique *Good To Go!* passes on I-405  
Weekdays from 5 a.m. to 7 p.m.

# What we're seeing:

## What drivers are choosing to pay

Percent of Peak Period 405 Toll Trips by Rate Category



# Goal #2: Provide a faster and more predictable trip

## What we anticipated

- **Faster Trip:** Express toll lanes will provide a faster trip.
- **Move More Vehicles and People:** By moving traffic more efficiently, we'll also move people.
- **More Predictable:** The previous HOV lane moved traffic at 45 mph on average 60 percent of the time.

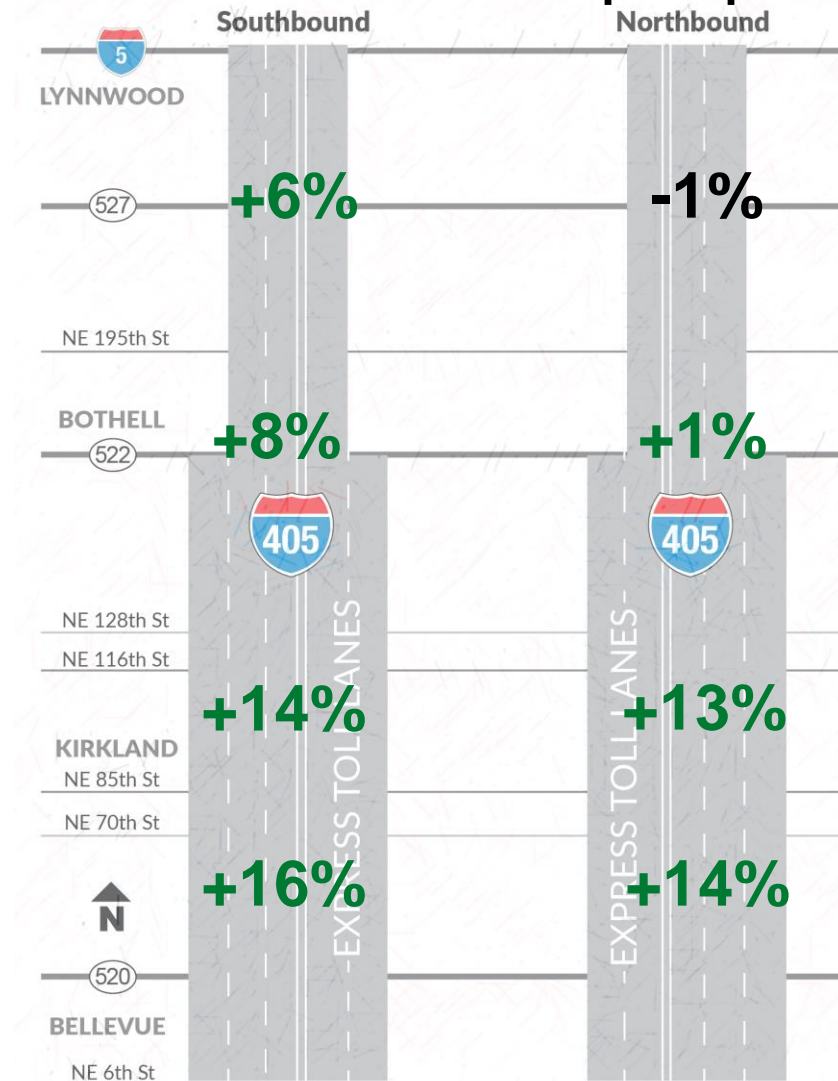
## What we're seeing

- **Faster Trip:**
  - For a full corridor trip during the peak period, the express toll lanes are saving drivers time over the general purpose lanes
    - Average ETL saves 13 minutes
  - Speeds in the general purpose lanes have improved in most areas.
- **Move More Vehicles and People:**
  - At NE 100th St, I-405 is moving 16 percent more people in the peak direction during the peak period based on sample data from August 2016.
- **More Predictable:** Express toll lanes keep traffic moving at 45 mph on average 85 percent of the time.

# What we're seeing: I-405 is moving more vehicles at peak periods

Combined volume increase for all lanes for peak period, peak direction trips

WSDOT added 7.5 lane miles of new capacity southbound for a **12% increase** in all lane miles.

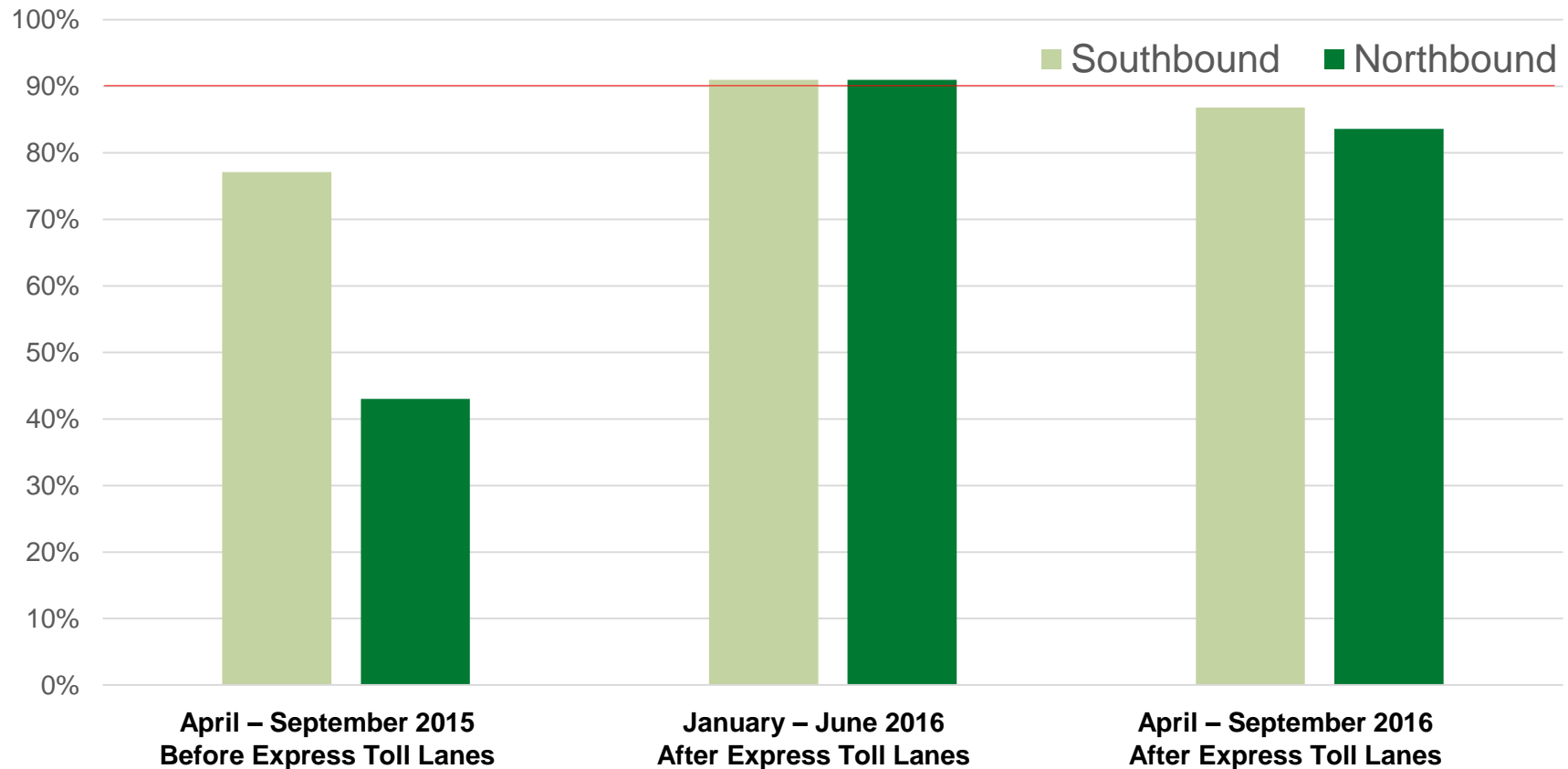


WSDOT added 3.5 lane miles of new capacity northbound for a **5% increase** in all lane miles.

# What we're seeing: Speeds and predictability have improved with express toll lanes

## I-405 Performance – Full Corridor

Percentage of Peak Periods and Peak Direction When Speeds are Greater Than 45 Miles Per Hour



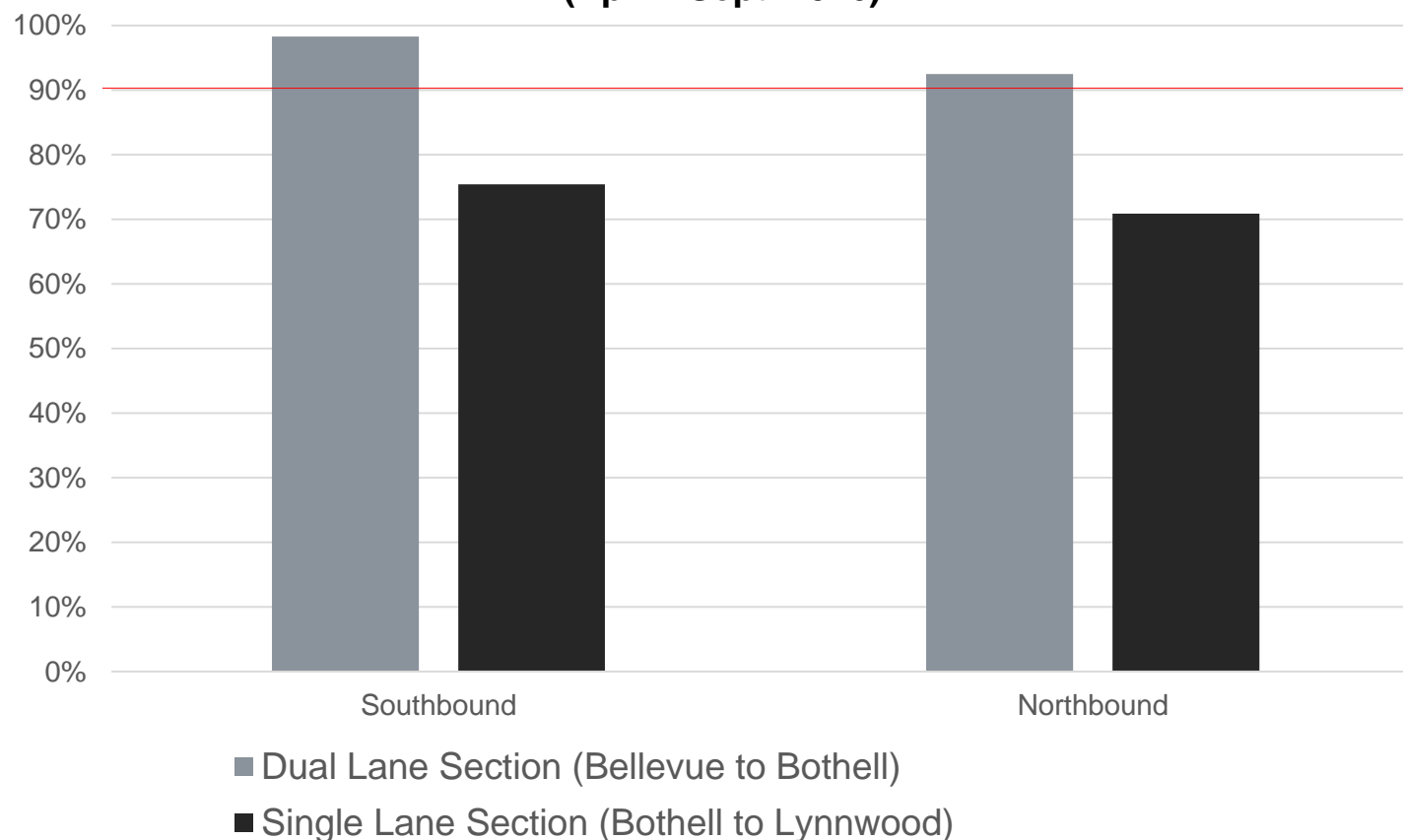
# What we're seeing:

Many factors impact the 45 mph metric

## I-405 Performance

### Single-Lane Section / Dual-Lane Section

Percentage of Peak Periods and Peak Direction When Speeds are Greater Than 45 Miles Per Hour  
(Apr. – Sept. 2016)





# Goal #3: Fund future corridor improvements

## What we anticipated

- **Fund future projects:** Generate enough revenue to cover operating expenses and fund other future I-405 improvements. The Connecting Washington transportation package identified \$215 million in toll revenue for funding I-405 Widening and Express Toll Lanes between Bellevue and Renton.

## What we're seeing

- **Fund future projects:** Higher utilization during first year of operation provided sufficient revenue to fund the Peak-Use Shoulder Lane project. Toll revenue from entire corridor anticipated to support Connecting Washington funding for I-405 Widening and Express Toll Lanes between Bellevue and Renton.

# Peak-Use Shoulder Lane

## Northbound I-405 from SR 527 to I-5

### Scope

- Convert right shoulder to general purpose peak-use shoulder lane on northbound I-405 between SR 527 and I-5
- Build new noise wall for area residents
- Complete improvements to express toll lane signage and access

### What is a peak-use shoulder lane?

- Traffic management strategy that uses a shoulder as a general purpose lane to provide additional capacity when needed (peak periods)
- Shoulder is preserved when traffic volumes are lower
- Dynamically controlled using overhead electronic signs



### Timeline

- **November 2016:** Design-build contractor selected
  - Graham Contracting Ltd.
  - *Funded with I-405 express toll lane revenue*
- **Winter 2017:** Construction start
- **Spring 2017:** Open to traffic

# Legislative Direction

The **2016 Supplemental Transportation Budget** directed WSDOT to study the north end of I-405, specifically:

**“the identification and prioritization of projects that will help reduce congestion and provide added capacity on the Interstate 405 tolling corridor between state route number 522 and Interstate 5.”**



# I-405 Master Plan Elements Under Evaluation



Master Plan elements currently being considered for next steps include:

Direct Access Ramps at:

- SR 527
- NE 195<sup>th</sup> Street
- SR 522
- NE 160<sup>th</sup> Street

Direct Connector Ramps (HOV to ETL) at:

- I-5/I-405 interchange

Lanes

- Two express toll lanes in each direction

Transit

- I-405 Bus Rapid Transit (inside operations)

# I-405 North End Projects Charrette

## Two-day workshop

Nov. 16 and 29, 2016

## Interagency participation:

- Cities of Bothell and Woodinville
- Community Transit
- Federal Highway Administration
- King County Metro
- Snohomish County
- Sound Transit
- WSDOT



## Objectives:

- Review WSDOT I-405 north end phasing concepts, brainstorm alternative solutions
- Gather input on challenges and considerations for improvements
- Develop recommendation for next priority improvements from Master Plan

# I-405 North End: Proposed Next Steps

- Evaluate charrette outcomes and continue coordination with partner transit agencies
- Report to Joint Transportation Committee Dec. 15 on options under consideration for SR 522 to I-5 area
- Recommend budget strategy to continue preliminary engineering work



# Immediate Next Steps: I-405 and SR 167

## I-405 Northbound Peak-Use Shoulder Lane, SR 527 to I-5

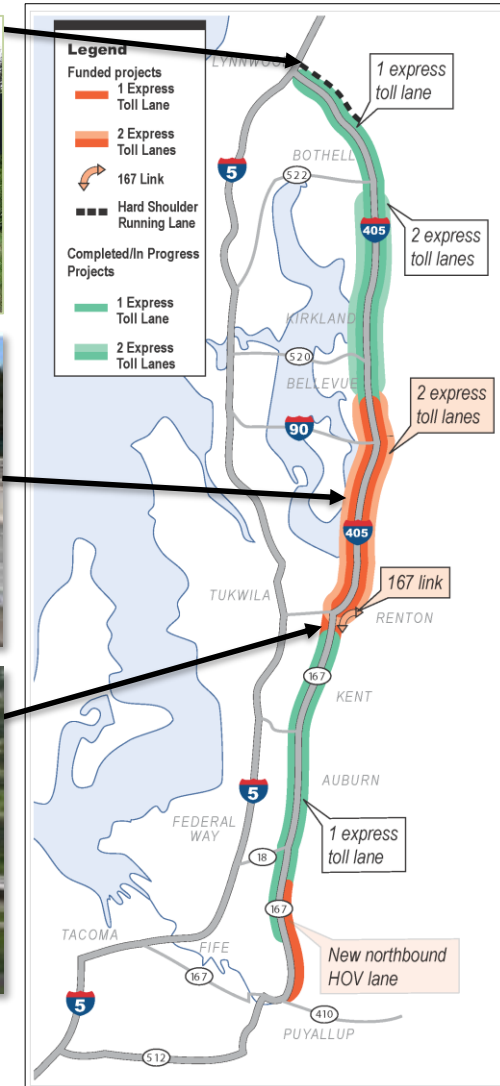
- Construction start in winter 2017
- Open to traffic by spring 2017

## Renton to Bellevue Widening and Express Toll Lanes

- Construction start in 2019
- Open in 2024

## I-405/SR 167 Direct Connector

- Contract award in 2016
- Open in 2019



# I-405/SR 167 Interchange Direct Connector

## Project Description:

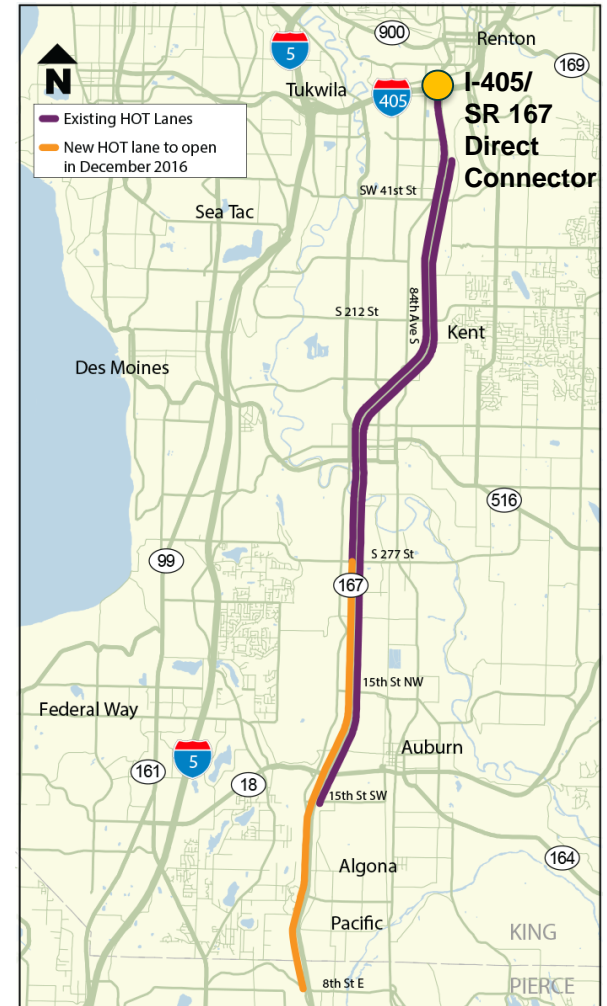
Builds a new flyover ramp connecting the SR 167 HOT lanes to the I-405 HOV lanes. Also relocates a noise wall and constructs portions of local streets in the Talbot Hill neighborhood.

- Groundbreaking in September 2016
- Guy F. Atkinson Construction of Renton starting construction in winter 2017
- Sanitary sewer relocation at South 14th Street (Talbot Hill) under way
- Olympic Pipeline relocation under way



# SR 167 Southbound HOT Lane Extension

- **Tolling scheduled to start December 17**
- Project delivery ahead of schedule and on budget
- Added new highway capacity to extend the southbound SR 167 HOT lane six miles from South 277<sup>th</sup> Street to 8<sup>th</sup> Street East
  - Provides commuters with an option for a faster more reliable trip
- Built two new noise walls
- Replaced culvert with fish-passable structure
- Installed new signals and improved pedestrian connections on local city streets



# Renton to Bellevue: Project Overview

- **Adds new highway capacity** to create a dual express toll lane system between State Route 167 in Renton and Northeast 6th Street in Bellevue. This project will complete a continuous 40-mile express toll lane system from I-405 in Lynnwood to SR 167 at the Pierce County line.
- **Improves four interchanges:** Northeast Park Drive and Northeast 44th Street in Renton, and 112th Avenue Southeast and Coal Creek Parkway in Bellevue.
- **Builds a new southbound general purpose lane** from I-90 to 112th Avenue Southeast in Bellevue.
- **Builds portions of the Eastside Rail Corridor regional trail**, including a new crossing over I-405 at the site of the former Wilburton rail bridge.\*
- **Builds new direct access ramp** at Northeast 44th Street in Renton.\*\*

\*Partnership with King County

\*\*Partnership with Sound Transit



**Estimated Schedule**  
Construction start: 2019  
Open to traffic: 2024



# Direct Access Ramp at NE 44th Street

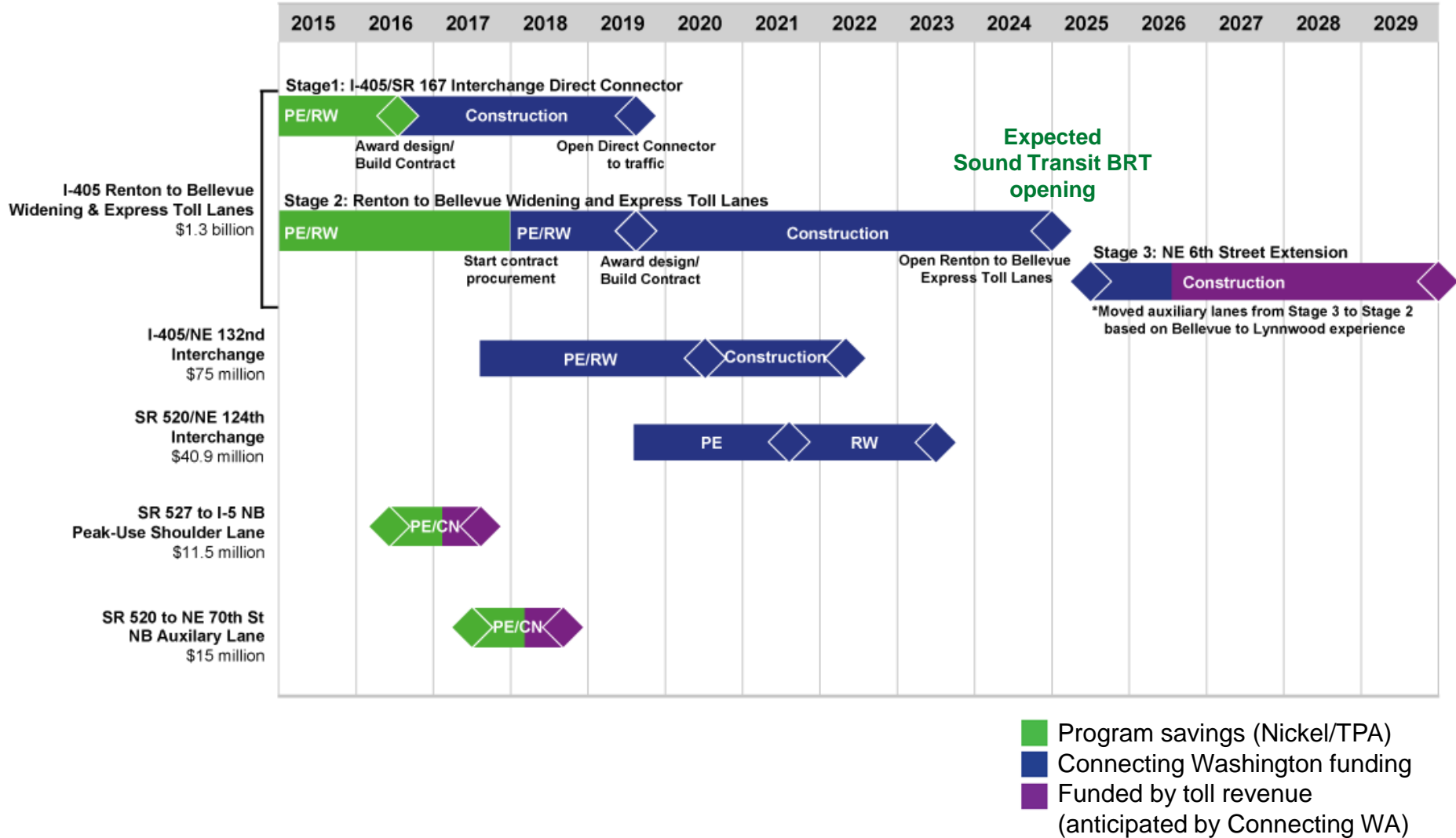
Sound Transit 3 package proposes for NE 44<sup>th</sup> Street interchange:

- Direct access ramps to express toll lanes
- Parking for transit users

Estimated 30% of existing ramp traffic would move to direct access ramps during peak periods.



# I-405 Delivery Schedule: Current Funding





# Discussion: WSDOT Update

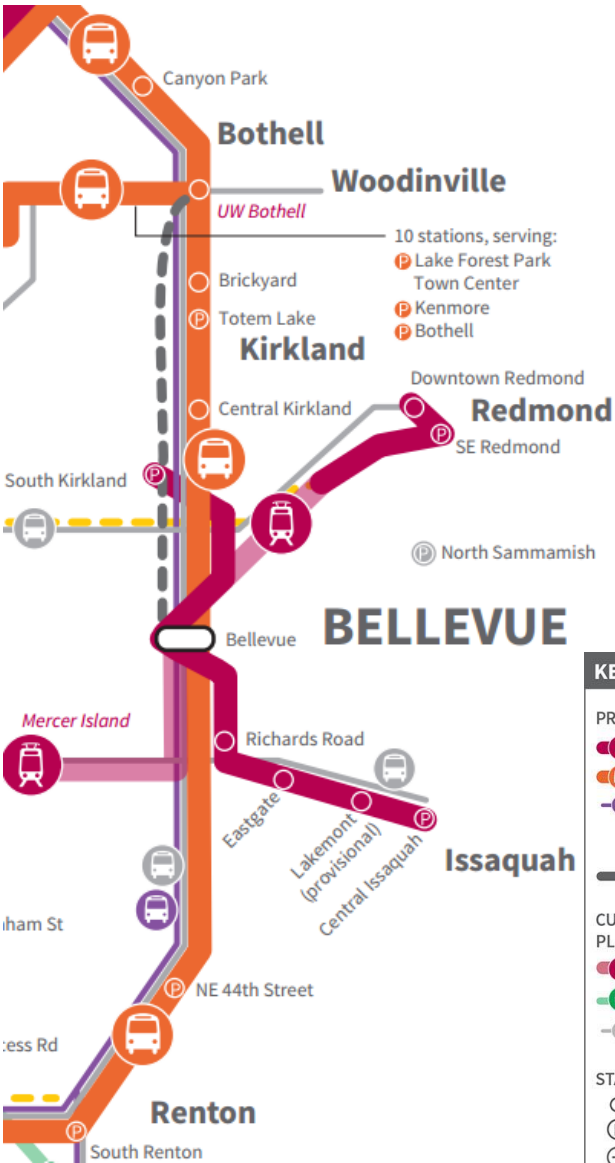
Facilitated by:  
**Roger Millar, P.E., AICP**  
Secretary of Transportation

A low-angle, close-up photograph of a Sound Transit light rail train. The train is white with a large teal and blue graphic on its side. Several windows are visible, reflecting the sky and the station structure. The train is moving along a track with a glass and steel station roof visible in the upper left corner.

# **ST3 I-405 BRT Project WSDOT EAG Meeting**












December 6, 2016

**SOUND TRANSIT**

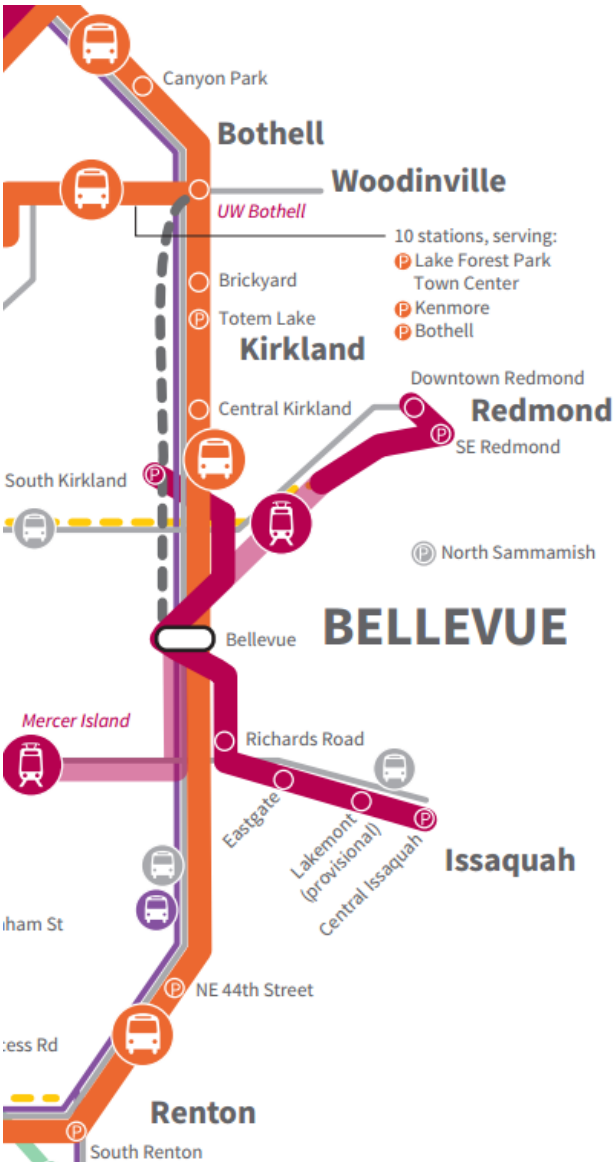


## ST3 Plan Eastside Projects

- Overlake to Downtown Redmond LRT
- South Kirkland to Bellevue to Issaquah LRT
- I-405 BRT
- SR 522 BRT
- Bothell-Bellevue HCT Study
- North Sammamish park & ride

| KEY   |  |
|---|--|
| PROPOSED ST3 PROJECTS   |  |
|    | Link Light Rail  |
|    | Bus Rapid Transit  |
|    | Proposed shoulder running buses/other speed and reliability improvements |
|  | Environmental study  |
| CURRENT AND PLANNED SERVICE   |  |
|  | Link Light Rail  |
|  | Sounder Rail   |
|  | ST Express Bus   |
| STATIONS  |  |
|  | New station  |
|  | New station / added parking  |
|  | Improved station   |
|  | Major rail transfer  |

NOTE: All routes and stations are representative.



# Eastside Cities Served

## Bus Rapid Transit I-405 & SR 522

- Bellevue (1 station)
- Bothell (6 stations)
- Kenmore (2 stations)
- Kirkland (2 stations)
- Renton (2 stations)

13 stations

## Light Rail

- Bellevue (8 stations)
- Issaquah (1 station)
- Kirkland (1 station)
- Mercer Island (1 station)
- Redmond (4 stations)

15 stations

## Express Bus/Parking

- Sammamish
- Woodinville

\*includes ST2 & ST3 projects

**SOUND TRANSIT 3**

**I-405  
BUS RAPID TRANSIT**
**I-405 BRT ELEMENTS**

- » Lynnwood Transit Center (existing) BRT station
- » Bothell – Canyon Park (existing) BRT station
- » Bothell – UW Bothell/NE 195th (existing) BRT station
- » Bothell – Brickyard (existing) BRT station
- » Kirkland – Totem Lake/Kingsgate (new) parking garage and (existing) inline BRT station
- » Kirkland – NE 85th Street (new) BRT station
- » Kirkland – Bus-only lanes on NE 85th Street from I-405 to 6th Street
- » Bellevue Transit Center (existing) BRT station
- » Renton – NE 44th Street (new) BRT station and direct access ramps with (new) parking lot
- » Renton – South Renton (new) BRT station with transit center and (new) parking garage
- » Tukwila – Tukwila International Boulevard Link Station (existing) BRT station
- » Tukwila to Burien – Bus-only lanes on SR 518 and other transit priority treatments
- » Burien Transit Center (existing) BRT Station

\*The I-405 BRT project definition includes separate operating lines north and south connecting in downtown Bellevue and does not double count the transfers between the two lines at Bellevue.

Alignments and stations shown are representative and are identified for purposes of cost estimating, ridership forecasting and other evaluation measures.

**MAP KEY**

- BRT STATION
- EXISTING FACILITY



# I-405 BRT

## Highlights

- Implementation by 2024
- 10 minute frequency in peak hours, 15 minute off-peak
- ST Express Route 532 from Everett to Bellevue will continue
- New stations at:
  - NE 85<sup>th</sup> Street in Kirkland
  - NE 44<sup>th</sup> Street in north Renton
  - Grady Way/Rainier in South Renton
- Connections at existing transit facilities and with SR 522 BRT at NE 195th

|  |  |                  |
|--|--|------------------|
|  | LENGTH (MILES)                                 | 38               |
|  | REGIONAL LIGHT RAIL SPINE                      | NO               |
|  | RIDERSHIP (DAILY PROJECT RIDERS)               | 15,000—18,000*   |
|  | CAPITAL COST (2014 \$ M)                       | \$812—\$869      |
|  | ANNUAL O&M COST (2014 \$ M)                    | \$26             |
|  | TRAVEL TIME (MIN)                              | 87               |
|  | RELIABILITY                                    | MEDIUM           |
|  | SYSTEM INTEGRATION                             | MEDIUM           |
|  | EASE OF NON-MOTORIZED ACCESS                   | MEDIUM-LOW       |
|  | PERCENT OF NON-MOTORIZED ACCESS                | 20—85%           |
|  | CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS | 7 CENTERS        |
|  | PLANS AND POLICIES                             | MEDIUM           |
|  | MARKET SUPPORT                                 | MEDIUM           |
|  | POP PER ACRE (2014/2040)                       | 7 / 12           |
|  | EMP PER ACRE (2014/2040)                       | 12 / 21          |
|  | POP+EMP PER ACRE (2014/2040)                   | 19 / 33          |
|  | MINORITY/LOW-INCOME                            | 39% / 12%        |
|  | POPULATION (2014/2040)                         | 37,400 / 65,800  |
|  | EMPLOYMENT (2014/2040)                         | 66,300 / 111,000 |



# I-405 North BRT

## Lynnwood to Bellevue

- In Express Toll Lanes and bus-only shoulder lanes for majority of trip
- In general purpose lanes from Lynnwood to Canyon Park
- Provides connection to SR 522 BRT at 195th/UW Bothell
- Serves Totem Lake
- Serves Central Kirkland





# I-405 South/SR 518 BRT

## Bellevue to Renton, Tukwila Int'l Blvd station & Burien Transit Center

- In Express Toll Lanes from Bellevue to S Renton
- In HOV lanes from S Renton to SR 518
- In GP lanes to Tukwila Int'l Blvd station (TIBS)
- In bus-only lanes from TIBS to Burien Transit Center



# Discussion: Sound Transit

Facilitated by:  
**Roger Millar, P.E., AICP**  
Secretary of Transportation

# Eastside Rail Corridor Regional Trail I-405 Executive Advisory Committee December 6, 2016

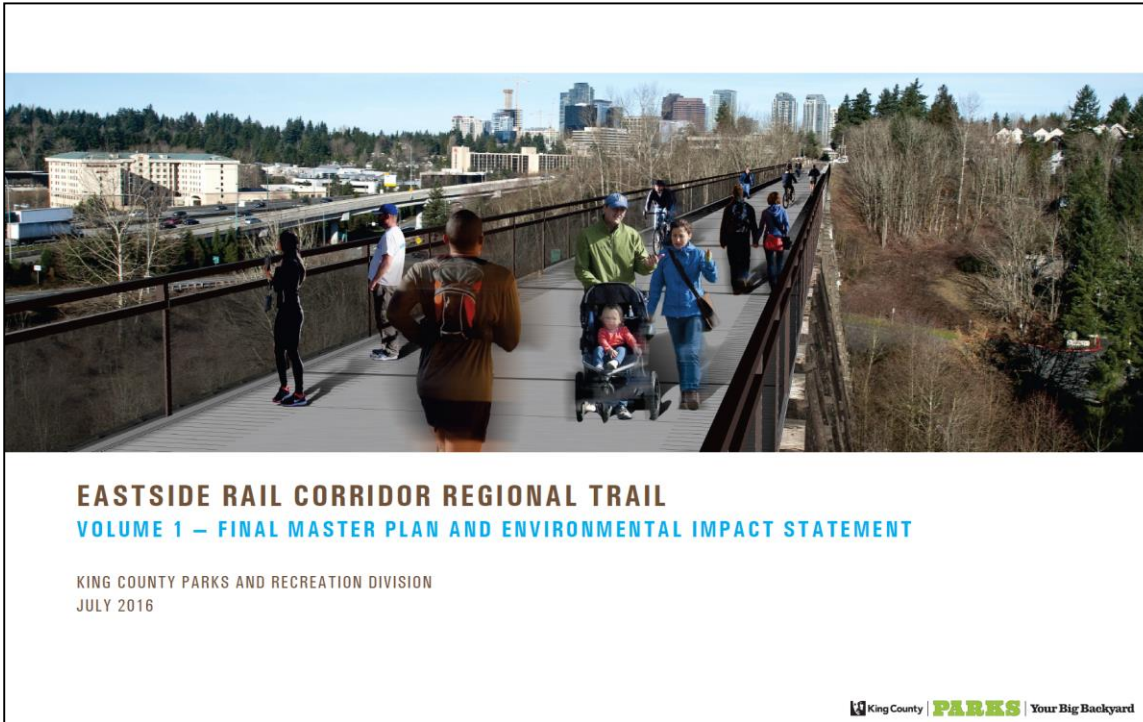




# Briefing Overview

- Trail Master Plan Update
- Corridor Overview and Preferred Alternative
- Implementation Priorities
  - Rail Removal and Interim Trail – Kirkland to Renton
  - Wilburton Segment Design (includes Wilburton Trestle)
  - Wilburton Gap: I-405 Bike/Ped Bridge
  - WSDOT Plans for Trail in ERC south of I-90
- Next Steps

# Trail Master Plan Update

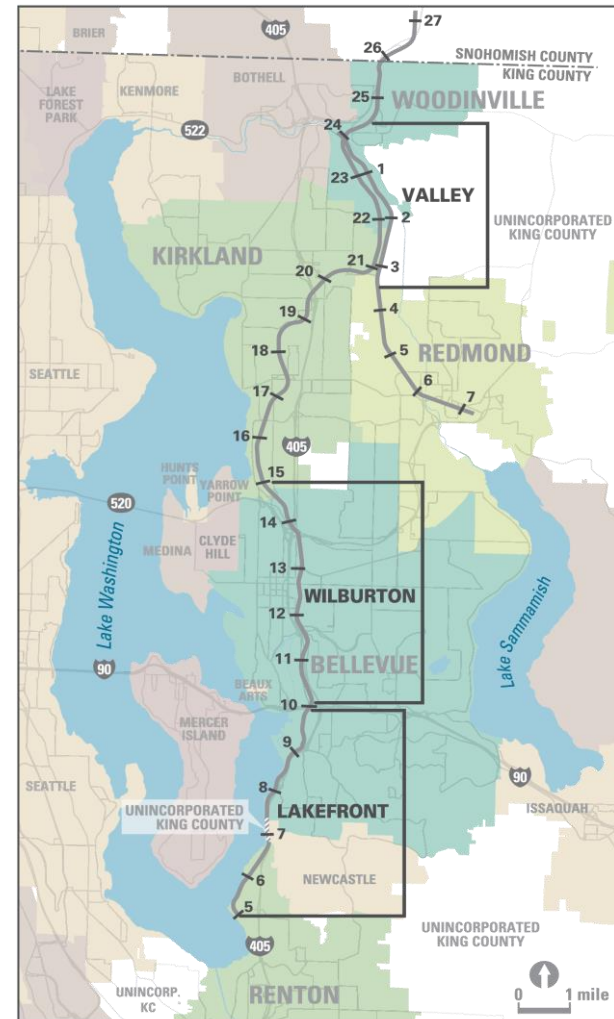


- Final Master Plan and Environmental Impact Statement (EIS) Published July 2016
- At King County Council for approval via motion
- Upon approval of Master Plan, DNRP will issue Notice of Action, commences 30 day appeal period under SEPA
- Final Master Plan and EIS online at: [www.kingcounty.gov/erc](http://www.kingcounty.gov/erc)

# Corridor Segments and Preferred Alternative

- **Valley** – Totem Lake to Woodinville, with Spur to Redmond
  - Connections between the Main Line, Spur, and Sammamish River Trail
  - Interest in potential excursion rail service
  - Most rural and passes through agricultural valley with numerous wineries
- **Wilburton** – 1-90 to 108<sup>th</sup> Ave NE (Cross Kirkland Corridor)
  - Most urban and commercial, major redevelopments
  - Major bridge structures needed
  - Sound Transit ownership and East Link Light Rail
- **Lakefront** – Renton to I-90
  - Most residential segment
  - Opportunity to connect to Cedar River Trail and Lake to Sound Trail through Renton
- **Preferred Trail Alignment - On-Railbed with few exceptions:**
  - Wetland avoidance
  - Alignment coordination with ST light rail or PSE project

**EASTSIDE RAIL CORRIDOR SEGMENTS**





# Moving into Implementation

## By June 2017

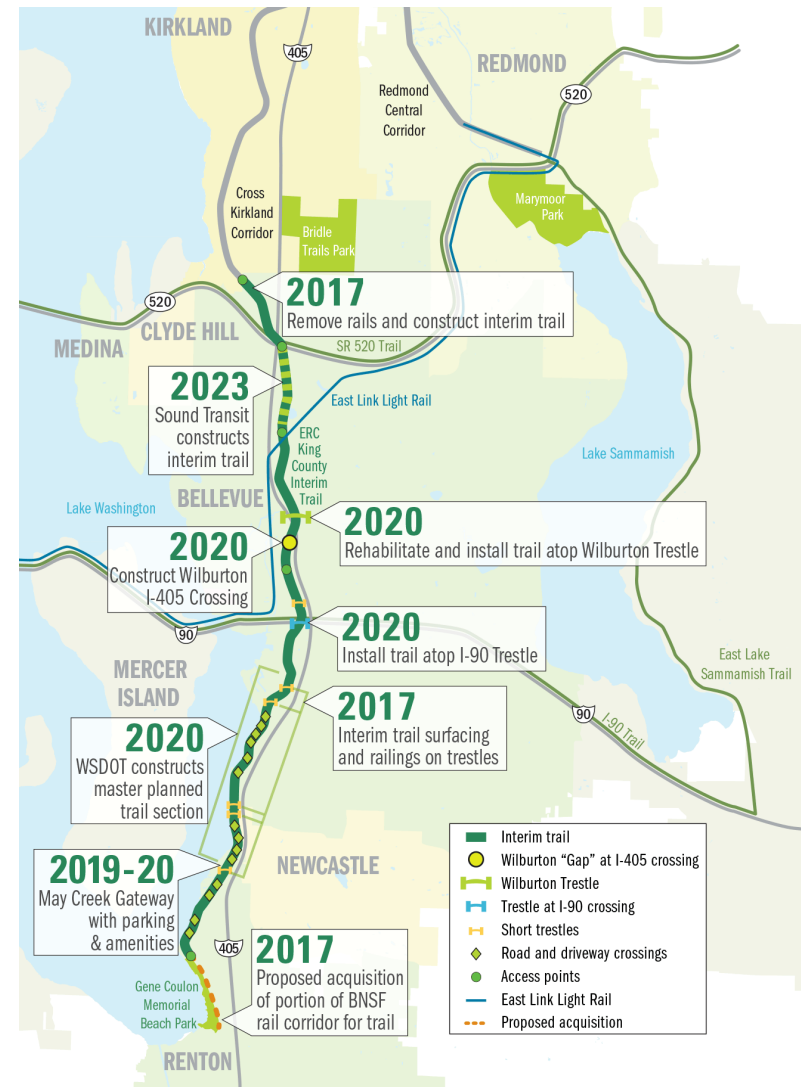
- Rail Removal from Kirkland to Renton
- Installation of Interim Trail like Cross Kirkland Corridor
- Installation of interim trail decking and rails on all trestles
- Possible acquisition of BNSF property alongside Coulon Park for trail extension

## By 2020

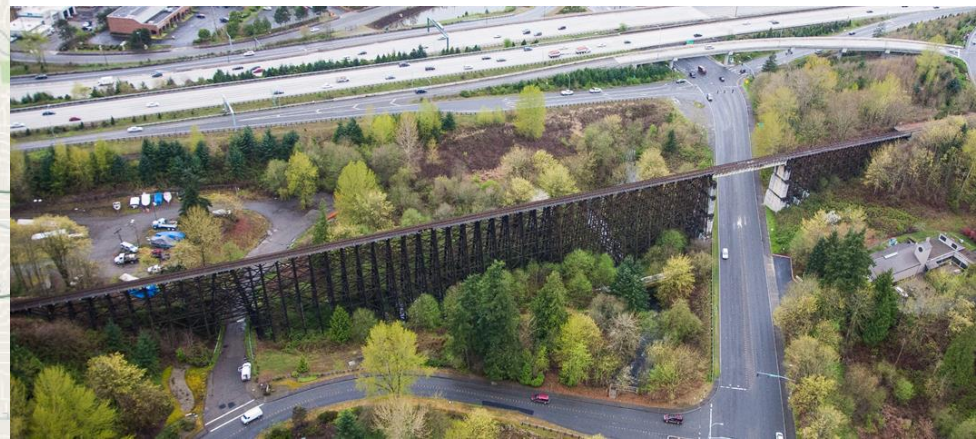
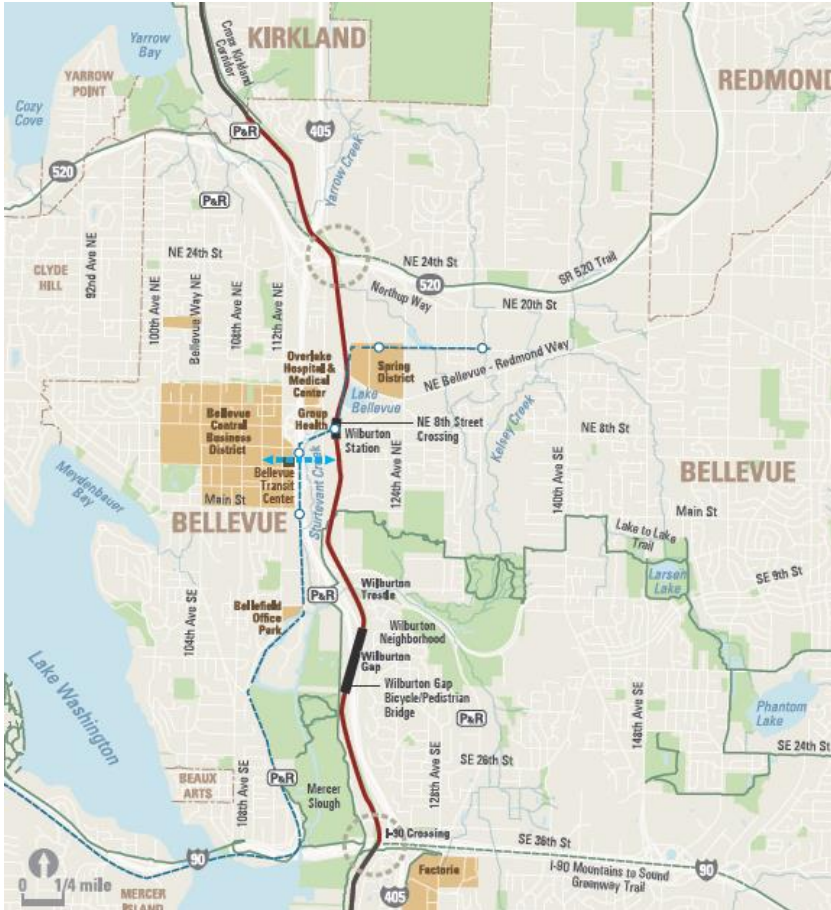
- Retrofit Wilburton Trestle with Trail as part of first Master Plan trail construction segment
- WSDOT constructs Wilburton I-405 Bridge
- WSDOT constructs trail section from Coal Creek to Ripley
- Install trail on I-90 Trestle
- Construction of May Creek Gateway (trail parking and amenities)

## By 2023

- Sound Transit constructs interim trail from NE 8<sup>th</sup> to SR 520

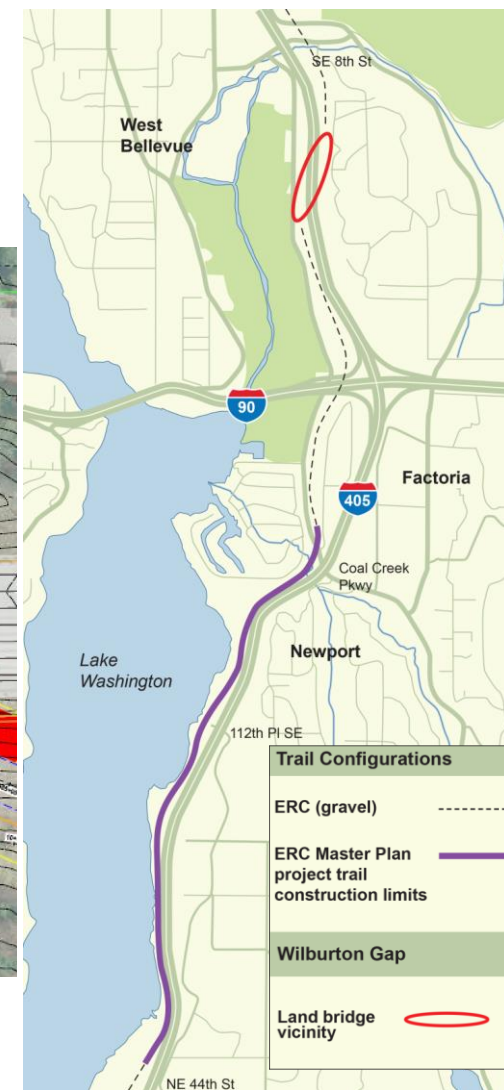
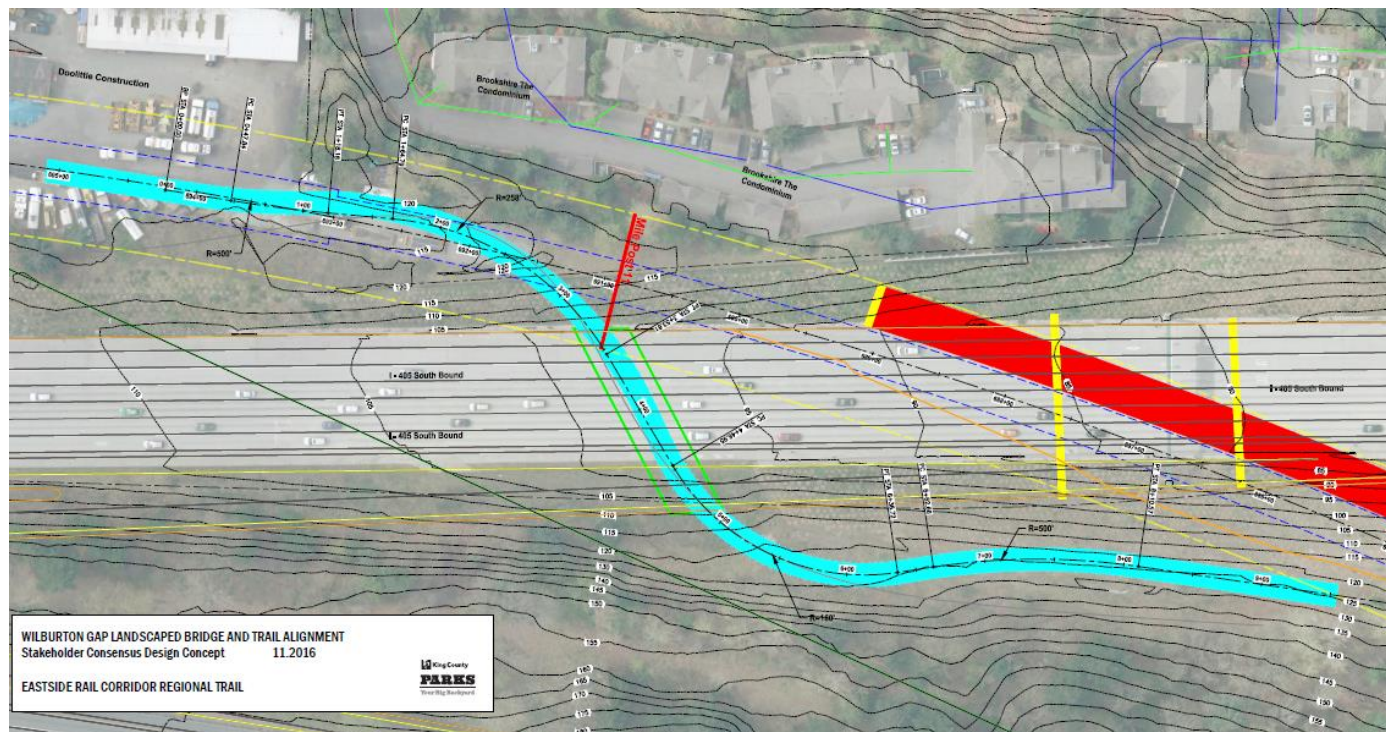


# Wilburton Segment Design: 2017-2019

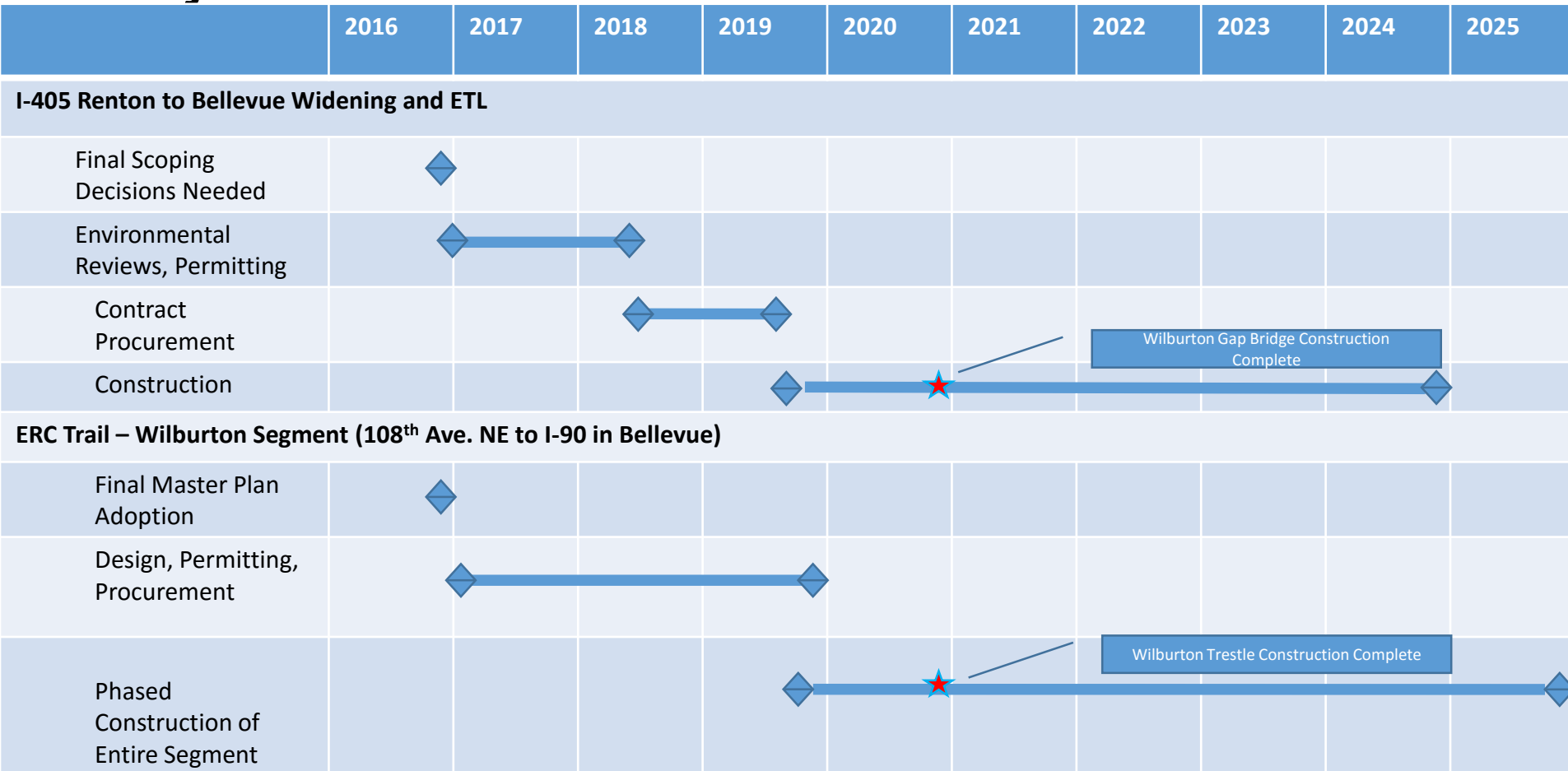




# WSDOT: Wilburton Gap Bike/Ped Bridge and ERC Trail south of I-90



# Project Schedules



# Next Steps

- Continue coordination with WSDOT on design criteria for I-405 bridge and trail in ERC
- Master Plan Approval at King County Council
- Design phase community/stakeholder engagement in 2017
  - Rail Removal and Interim Trail
  - Wilburton Segment Design
  - Wilburton Gap Bike/Ped Bridge
  - WSDOT Trail Replacement in ERC Lakefront Segment
  - Lakefront & Valley Segment: Trestles, Gateways, Crossings & Connections

# Questions?

**Erica Jacobs**

Project Manager

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**PARKS**

**Your Big Backyard**



# Discussion: King County

Facilitated by:  
**Roger Millar, P.E., AICP**  
Secretary of Transportation

# Public Comment

Facilitated by:

**Anne Broache**

I-405/SR 167 Program Communications

# Wrap Up

**Roger Millar, P.E., AICP**  
Secretary of Transportation